

LISTING OF CLAIMS:

The following listing of claims replaces all previous versions and listings in the present application.

Please cancel claims 4, 5, and 7-14.

1. (Currently amended) A magnetic sensor comprising:

a magnetic sensor chip;

a chip mounting member on which the magnetic sensor chip is mounted at a mounting position;

an adhesive material for bonding the magnetic sensor chip to the chip mounting member;

an encapsulating material for encapsulating the magnetic sensor chip; and

a magnetic-field generating portion formed by magnetizing ~~at least one of the chip mounting member, the adhesive material, and the encapsulating material.~~

2. (Original) The magnetic sensor according to claim 1, wherein the encapsulating material is magnetized at a portion opposite to the position at which the magnetic sensor chip is mounted.

3. (Original) The magnetic sensor according to claim 1, wherein the encapsulating material is magnetized at a portion that is located on a side of the magnetic sensor chip.

4. - 5. (Canceled)

6. (Original) A magnetic sensor comprising: a magnetic sensor chip;

a chip mounting member, for mounting the magnetic sensor chip thereon, with a magnetized portion on which the magnetic sensor chip is mounted;

a magnetized adhesive material for bonding the magnetic sensor chip to the chip mounting member; and

an encapsulating material for encapsulating the magnetic sensor chip therein, the encapsulating material having a magnetized portion on a surface opposite to the mounting surface of the magnetic sensor chip on the chip mounting member, the magnetized portion of the encapsulating material corresponding to the magnetized portion of the chip mounting member.

7. – 14 (Canceled)

15. (New) A magnetic sensor comprising:

a magnetic sensor chip;

a chip mounting member on which the magnetic sensor chip is mounted;

an adhesive material for bonding the magnetic sensor chip to the chip mounting member;

an encapsulating material for encapsulating the magnetic sensor chip; and

a magnetic-field generating portion formed by magnetizing the encapsulating material,

wherein the magnetic sensor chip comprises multiple magneto-resistance elements

(MREs) for forming MRE bridges, each of the multiple MREs having a detection axis, and

wherein the magnetic-field generating portion is positioned such that a magnetic field generated by the magnetic-field generating portion is inclined for biasing at an angle of 45 degrees to respective detection axes of the MREs.

16. (New) A magnetic sensor comprising:

a magnetic sensor chip;

a chip mounting member on which the magnetic sensor chip is mounted;

an adhesive material for bonding the magnetic sensor chip to the chip mounting member;

an encapsulating material for encapsulating the magnetic sensor chip; and

a magnetic-field generating portion formed by magnetizing the encapsulating material,

wherein the encapsulating material is made of a mixture of heat-resistant resin and magnetic powder.

17. (New) The magnetic sensor according to claim 16, wherein the chip mounting member includes a heat-generating portion, the heat generating portion including a part of the chip mounting member reduced in shape so as to have an increased resistance, the heat-generating portion generating heat when current is supplied to the chip mounting member when magnetizing the encapsulating material.